



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10:023,291	12/14/2001	George E. Berkey	SP00-386	7658

22928 7590 12/09/2003
CORNING INCORPORATED
SP-TI-3-1
CORNING, NY 14831

EXAMINER

HOFFMANN, JOHN M

ART UNIT PAPER NUMBER

1731

DATE MAILED: 12/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/023,291	BERKEY ET AL.	
	Examiner	Art Unit	
	John Hoffmann	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-5, 7-10, 12-16 and 39-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-5, 7-10, 12-16, 39-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet, 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet, 37 CFR 1.78.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The elected claims are directed to a method, not to the fiber.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-10, 41, and 43-54 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 is not accurate: Claim 1 requires that "the soot" is on the mandrel. The glass which is on the tube, is not on the mandrel. Therefore it is other soot. The claims could say something like : --depositing additional soot onto the tubular glass body.--

Claim 43 is not understood as to whether it requires insertion into both ends, or only one of the ends. MPEP 2173.05(h) mentions various ways to claim alternative items, it is suggested that the claim be amended in accordance with one of them. The present claim language is not indicated as being acceptable/definite by this portion of the MPEP.

Likewise for claims 47-49: it is unclear if the claims are to be interpreted as "at least one member of the group comprising" or "at least one member of the group consisting".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7-10, 12-15, 41-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berkey 5917109 in view of Shang ("Low-OH MCVD Fibres without a Marrier layer Using OH-OD -exchanged substrate Tubes" Electronics Letters Vol. 19, No. 3, 95-96) and/or Burrus 4515612.

Berkey discloses the invention at col. 8, line 46 to col.9, line 5. It is noted that a tube can be a plug: see present specification, paragraph 134, line 3. Berkey does not disclose that the plug is ever deuterated. Shang discloses that starting glass objects are a source of OH contamination (first paragraph, lines 13-18). Burrus discloses the same thing (col. 6, lines 28-37 and col. 2, lines 41-53.) It would have been obvious to use only deuterated items (including the plug) in the Berkey method so as to prevent OH contamination as taught by Shang and/or Burrus.

Claim 2 is clearly met in as much as the present invention meets it.

Claim 3: Col. 9, lines 7-22 discloses the portion of the consolidation step which closes both ends.

Claims 7-10, 41-45 are clearly met.

Claims 12 and 15: see col. 9, lines 24-27 of Berkey.

Claims 13-14 are met by another but similar process disclosed at figures 1-3 and col. 4, line 46 to col. 5, line 32. 10 is the substrate, 13 shows the depositing of soot, 19 is the inserted glass body/plug in to the bore from which the substrate is removed. Figure 3 shows the overlapping of claim 13. The consolidation of claim 14 is disclosed at col. 6, lines 46-56.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berkey and Shang and/or Burrus applied to claim 1 above, and further in view of Freund 4685945.

Berkey does not teach Deuteration of the fiber. However, Berkey discusses reducing water/hydroxyl contamination: col. 2, lines 25-28 and col. 3, lines 19-24. Freund is directed to improving fibers of low-hydroxyl fibers- see for instance, col. 2, lines 57-63. It would have been obvious to perform the Freund method (see claim 1) on the Berkey fiber, for the advantages that Freund discloses.

Claims 1-5, 7-10, 12-16, 39-54 are provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 09/722,804, 09/996,632, 09/822,168, and/or 09/558,770, which have a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if published or patented. This provisional rejection under 35 U.S.C. 103(a) is based upon a presumption of future publication or patenting of the conflicting application. The rejection is in view of Burrus, 4515612 - as discussed

elsewhere in this Office Action, the Burrus disclose deuterating staring glass, so as to greatly reduce contamination. It would have been obvious to alter the inventions of the prior applications by deuterating the glass objects, so as to reduce contamination due to OH diffusion.

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application under 37 CFR 1.131. For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1,4,5, 39-40 and 49-54 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19 (and 18 for claim 39) of U.S. Patent No. 6477305.

The Patent does not require deuterium to be the chemical used to dry the glass. It would have been obvious to use deuterium because such is a well known glass drying agent. It is noted that '305 discloses deuterium is a drying agent.: col. 10, line 66.

Claims 42-48 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 18-19 of U.S. Patent No. 6477305 in view of Burrus 4515612.

Claim 18 of the '305 patent refers to "a part" of the reaction product being deposited on the substrate. It is clear from the disclosure that the part that is not deposited on the substrate is deposited on the tube 32: see figure 2. There is no teaching that the tube 32 is deuterated. Burrus Col. 6, lines 28-37 and elsewhere discloses deuterating starting tubes and rods so as to greatly reduce contamination from OH. It would have been obvious to deuterate the '305 tube, so as to prevent contamination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 7-9, 12-16, 39--41, and 49-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Berkey 6477305

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

See at least claims 18-19, col. 9, lines 25-41, and col. 10, lines 65-67 of the Berkey Patent.

For claim 39: Berkey's claim 19 discloses one of the plugs can be non-deuterated.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

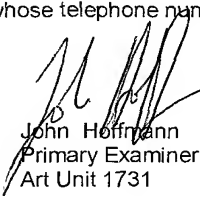
Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

Application/Control Number: 10/023,291
Art Unit: 1731

Page 9

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


John Hoffmann
Primary Examiner
Art Unit 1731

12-2-03

jmh